



Construction waste: from problem to resource

1. Construction waste - from problem to resource
2. Waste management plan - why and how?
3. Environmental impact assessment
4. Hazardous material survey
5. Waste sorting and organization on construction site
6. How does the waste industry handle the various types of waste?



How does the waste industry handle the various factions

We will look at:

- ✓ From origin to final disposal
- ✓ Reuse, recycling, recovery or landfill
- ✓ Declaration of hazardous waste



From sorting on the construction site to waste treatment

- ✓ Today's requirements for sorting waste fractions: 70%.
- ✓ The contractor should agree the delivery of waste fractions with waste facilities with permission from the State Administrator.
- ✓ The contractor is responsible for the waste until it is delivered to an approved reception.

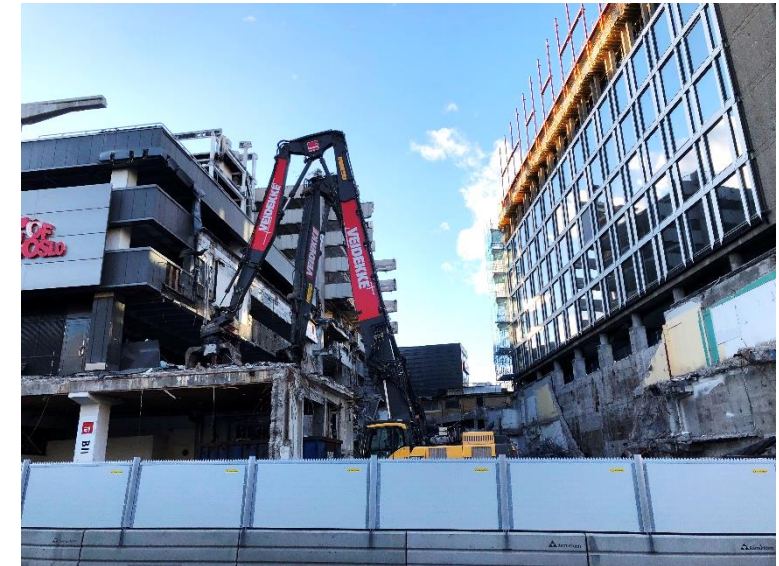


Photo: Guro Kristine Milli



Muligheter og begrensninger

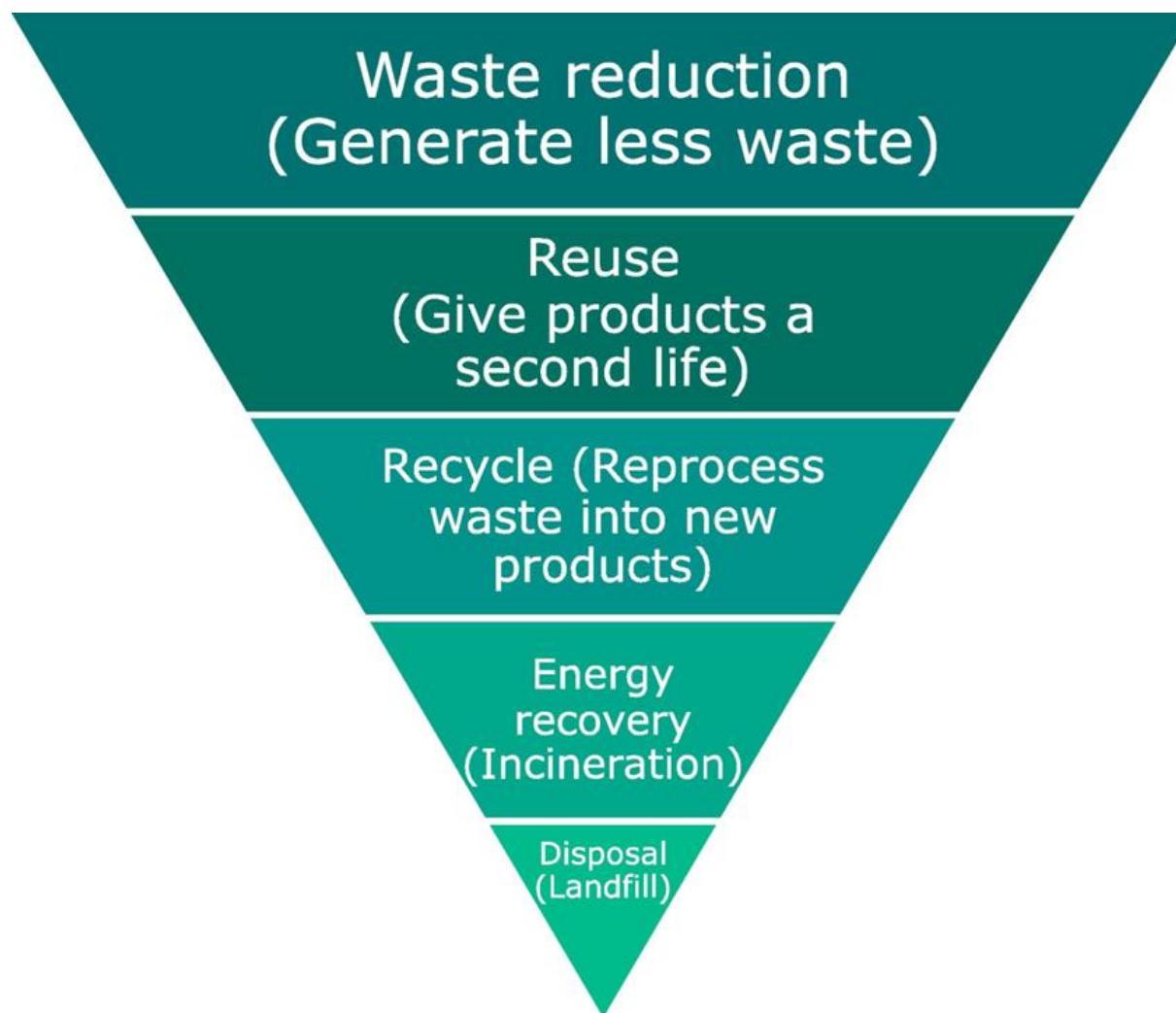
- ✓ Contact the facility early in an early phase of the project.
- ✓ Clarify what is feasible.
- ✓ Which downstream solutions are relevant for different factions?
- ✓ Good interaction and good cooperation with facilities is beneficial.



Photo: Sverre Valde



The waste hierarchy





Recycling

Examples of fractions for recycling:

- ✓ Metals
- ✓ Plaster
- ✓ Glass
- ✓ Plastic
- ✓ Cardboard and paper
- ✓ Concrete



Photo: Sverre Valde



Recycling – examples

Untreated wood



Photo: Sverre Valde



Photo: Clas Olshon



Insulation



Photo: Sverre Valde

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Plaster



Photo: Sverre Valde



Recycling - example

Sealed glazing units

- ✓ Collected unbroken
- ✓ The glass is cut loose
- ✓ The glass is sent to Glava for use in new insulation
- ✓ Insulating glue, spacing strips and frames are sent for hazardous waste incineration



Photo: Sverre Valde



Energy recovery

Examples of fractions for energy recovery:

- ✓ Untreated wood
- ✓ Treated wood
- ✓ Combustible hazardous waste
- ✓ Paint
- ✓ Vinyl coating
- ✓ Vinyl tiles (non-asbestos-containing)
- ✓ Glue
- ✓ Roof foil
- ✓ Joint compounds
- ✓ Combustible general waste



Photo:: Guro Kristine Milli



Landfilling

Examples of fractions for landfill:

- ✓ Asbestos-containing materials
- ✓ Heavy building materials that cannot be recycled Inorganic
- ✓ Other inorganic hazardous waste



Photo: Eirik Wormstrand



Multi contaminated fractions

- ✓ Waste containing asbestos together with other hazardous substances
- ✓ Should be treated as asbestos waste
- ✓ That is: wrapped in dust-proof plastic and placed in a separate section in a landfill

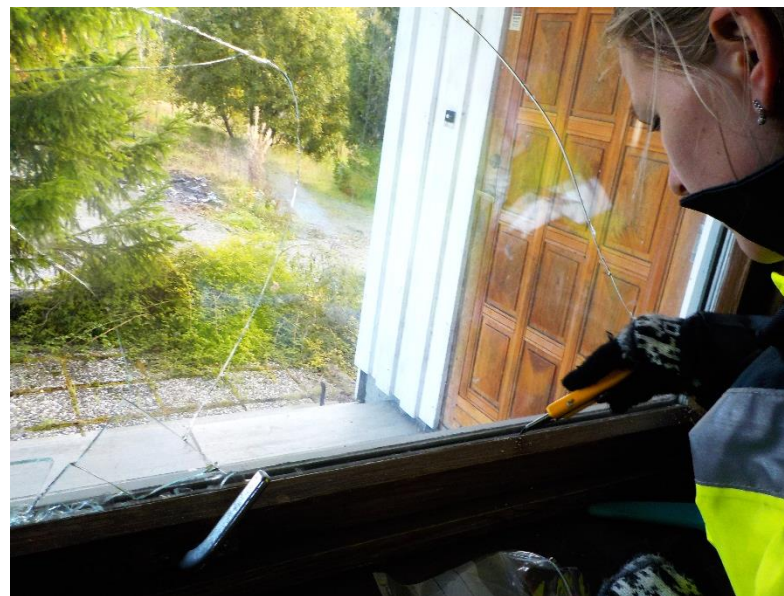


Photo: Mirja Emilia Ottesen



Multi contaminated fractions

- ✓ Concrete with insulation is a problematic fraction
- ✓ The concrete may be contaminated
- ✓ The insulation cast into concrete may be hazardous waste
- ✓ Insulation cast into the concrete is difficult to remove from concrete





Export of hazardous waste

- ✓ Common practice is that only hazardous waste for recycling receives an export permit.
- ✓ Hazardous waste for landfill may be permitted if the waste cannot be disposed of in a proper manner in Norway.
- ✓ Eg: organic hazardous waste that cannot be disposed of in Norway (transformers and capacitors with PCBs)
- ✓ Exports require consent from Norwegian (country of export) and foreign (country of import) authorities



Waste producer's responsibility - declaration

Waste producers are required to complete a declaration form upon delivery, to an approved waste facility. www.avfallsdeklarering.no

AVFALLSDEKLARERING.NO Statens strålevern MILJØ-DIREKTORATET

FORSIDE INFORMASJON VEILEDERE REGELVERK AVFALLSKODER AVFALLSMOTTAK HJELP

Om løsningen

Avfallsdeklarering.no er en løsning for deklarerer av farlig avfall og radioaktivt avfall. Løsningen benyttes av aktører med deklarasjonsplikt, myndigheter og andre som ønsker innsyn i deklart avfall.

Avfallsdeklarering.no er ikke tilrettelagt for bruk på mobiltelefon.

LOGG INN [Administrasjon ?](#)

Brukernavn

Passord

[Glemt passord?](#)

HVEM MÅ DEKLARERE?

Avfallsprodusenter og mottakere er pliktige å deklare farlig avfall. Husholdninger og privatpersoner trenger ikke deklare avfall, men skal opplyse om innholdet i avfallet ved levering til kommunale innsamlingsordninger.

HVA SKAL DEKLARERES?

Avfall som er klassifisert som farlig og/eller radioaktivt skal deklarerer. Avfall som verken er farlig eller radioaktivt, smittefarlig avfall, ordinært avfall, kasserte eksplosiver skal ikke registreres i denne databasen.

HVORFOR?

Farlig avfall kan forårsake skader på miljø, mennesker og dyr. Deklarering gjør at myndighetene får oversikt over hvor mye farlig avfall som finnes, hvor det har oppstått og hvem som har tatt hånd om det.

[Veiledere >](#) [Regelverk >](#) [Avfallskoder >](#) [Avfallsmottak >](#)



Declaration of hazardous and radioactive waste

- ✓ Responsibility for completing the declaration form lies with the waste producer or a company authorized by the waste producer.
- ✓ Information on the waste producer, the waste (type and quantity) and recipient of the waste must be entered, among other things.
- ✓ Each type of waste requires a completed declaration form for separate deliveries.
- ✓ The declaration form are signed by the waste facility on arrival of the shipment.